

# **User Manual**

E6473 First Edition V1 April 2011

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# About this guide

This user guide contains information that you need to install and configure the ASUS Wireless Router.

## How this guide is organized

This guide contains the following parts:

#### Chapter 1: Knowing your wireless router

This chapter provides information on the package contents, system requirements, hardware features, and LED indicators of the ASUS Wireless Router.

#### Chapter 2: Getting started

This chapter provides instructions on setting up the Router, Repeater, and Access Point modes of the ASUS Wireless Router.

#### Chapter 3: Configuring the network clients

This chapter provides instructions on setting up the clients in your network to work with your ASUS Wireless Router.

#### · Chapter 4: Configuring via the web GUI

This chapter provides instructions on configuring the ASUS Wireless Router using its web graphics user interface (web GUI).

#### • Chapter 5: Installing the utilities

This chapter provides information on the utilities that are available from the support CD.

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This chapter provides you with a troubleshooting guide for solving common problems you may encounter when using the ASUS Wireless Router.

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#### • Appendices

This chapter provides you with the regulatory Notices and Safety Statements.

### Conventions used in this guide



**WARNING**: Information to prevent injury to yourself when trying to complete a task.



**CAUTION**: Information to prevent damage to the components when trying to complete a task.



**IMPORTANT:** Instructions that you MUST follow to complete a task.

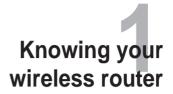


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**NOTE**: Tips and additional information to aid in completing a task.

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# **Package contents**

Check the following items in your ASUS Wireless Router package.

- RT-N12 B1 Wireless Router x1
- Power adapter x1
- Support CD (manual, utilities) x1
- RJ45 cable x1
- Detachable antenna x2
- Quick Start Guide x1

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Note: If any of the items is damaged or missing, contact your retailer.

# System requirements

Before installing the ASUS Wireless Router, ensure that your system/network meets the following requirements:

- An Ethernet RJ-45 port (10Base-T/100Base-TX)
- At least one IEEE 802.11b/g/n device with wireless capability
- An installed TCP/IP and Internet browser

# Before you proceed

Take note of the following guidelines before installing the ASUS Wireless Router:

- The length of the Ethernet cable that connects the device to the network (hub, ADSL/cable modem, router, wall patch) must not exceed 100 meters.
- Place the device on a flat and stable surface as far from the ground as possible.
- Keep the device clear from metal obstructions and away from direct sunlight.
- Keep the device away from transformers, heavy-duty motors, fluorescent lights, microwave ovens, refrigerators, and other industrial equipment to prevent signal loss.
- Install the device in a central area to provide ideal coverage for all wireless mobile devices.

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Install the device at least 20cm from a person to insure that the product is • operated in accordance with the RF Guidelines for Human Exposure adopted by the Federal Communications Commission.

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# Hardware features

## **Front panel**



### Status indicators

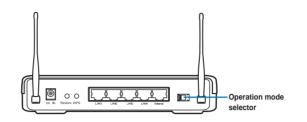
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| LED                          | Status                         | Indication  |
|------------------------------|--------------------------------|---|
| (Power)                      | Off                            | No power or wireless signal is disabled                 |
|                              | On                             | System ready  |
|                              | Flashing-slow                  | Rescue mode   |
|                              | Flashing-quick                 | WPS processing  |
| <sup>(i; i)</sup> (Wireless) | (i'i') (Wireless) Off No power |   |
|                              | On                             | Wireless system ready                                   |
|                              | Flashing                       | Transmitting or receiving data (wireless)               |
| 🖵 LAN 1-4                    | Off                            | No power or no physical connection                      |
| (Local Area<br>Network)      | On                             | Has physical connection to an Ethernet network          |
|                              | Flashing                       | Transmitting or receiving data (through Ethernet cable) |
| O WAN (Wide                  | Off                            | No power or no physical connection                      |
| Area Network)                | On                             | Has physical connection to an Ethernet network          |
|                              | Flashing                       | Transmitting or receiving data (through Ethernet cable) |

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# Rear panel



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| Label     | Description   |
|-----------|---|
| WAN       | Connect an RJ-45 Ethernet cable to this port to establish WAN connection.                           |
| LAN1-LAN4 | Connect RJ-45 Ethernet cables to these ports to establish LAN connection.                           |
| DC IN     | Insert the AC adapter into this port to connect your router to a power source.                      |
| WPS       | Press this button to establish wireless connection.   |
| Restore   | Press this button for more than five seconds to restore the system to its factory default settings. |

| ltem                          | Description   |  |  |
|-------------------------------|---|--|--|
| Operation<br>mode<br>selector | Use this selector to choose an operation mode:<br><b>Router (IP Sharing mode):</b> In the Router mode, the wireless<br>router connects to the Internet via PPPoE, Automatic IP, PPTP,<br>L2TP, or Static IP, and provides you with wireless radio signals.<br>The NAT, firewall, and IP sharing services for LAN clients are<br>enabled.<br><b>Repeater:</b> In this mode, the wireless router extends your wireless<br>network coverage and provides you with higher quality wireless<br>radio signals. The NAT, firewall, and IP sharing services are<br>disabled.<br><b>Access Point (AP):</b> In this mode, the wireless router receives<br>the WAN IP address from the router connected to the WAN port<br>and provides you with wireless radio signals. The NAT, firewall,<br>and IP sharing services are disabled. |  |  |

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# Setting up the wireless router

The ASUS Wireless Router includes a web graphics user interface (web GUI) that allows you to configure the wireless router using your web browser on your computer.



Note: For details on configuring your wireless router using the web GUI, refer to Chapter 4: Configuring via the web GUI.

You can set up the wireless router in any of these three operation modes: Router (IP Sharing), Repeater, and Access Point (AP). Set up the wireless router in the Router (IP Sharing) and Repeater modes via the Quick Internet Setup (QIS), and the AP mode via the web GUI.

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Note: To set up the wireless router in the AP mode, use Device Discovery included in the support CD to access the web GUI.

# Using the Quick Internet Setup (QIS)

The Quick Internet Setup (QIS) function, which is integrated in the wireless router's web GUI, detects the Internet connection type automatically and guides you in setting up your network quickly.

The QIS web page appears automatically after you connected all your devices and launched your web browser. You may also launch the QIS from the Network Map page in the web GUI. To do this, click **Go** in the QIS field under Internet status.

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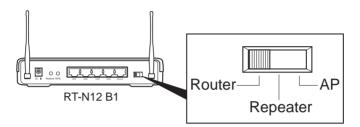


## Setting up the wireless router in Router mode

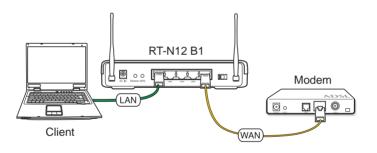
In the Router mode, the wireless router connects to the Internet via PPPoE, Automatic IP, PPTP, L2TP, or Static IP, and provides you with wireless radio signals. The NAT, firewall, and IP sharing services for LAN clients are enabled.

#### To set up the wireless router in Router mode:

1. Choose the Router mode.



2. Connect your devices.



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Note: We recommend that you use an Ethernet cable (wired connection) to connect your computer to the wireless router for initial configuration to avoid possible setup problems due to wireless uncertainty.

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12 RT-N12 B1

Launch your web browser and the QIS starts to detect your Internet connection type.

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| Detecting your connection type   |
|--|
| Shart to detect your connection type<br>Detection at (1 / 2 ) times, the maximum time of<br>detection is 20 seconds. |

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Note: If the QIS web page does not appear after you launched your web browser, disable the proxy settings on your web browser.

4. Key in the user name and password. Click Apply all settings.

|            | Account Setting   |  |
|------------|---|--|
| The second | User Name   |  |
| +          | Password  |  |
| A          | Please key in the account and password given by your<br>Internet Service Provider(ISP). |  |
|            | DO NOT key in the default username and password admin / admin.                          |  |
| ~          |   |  |
|            |   |  |



#### Note:

- The PPPoE Internet connection type is used in this setup case. The setup screen varies with different Internet connection types.
- Obtain the required information such as the username and password from your Internet Service Provider (ISP).

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Chapter 2: Setting up the hardware

5. The Internet connection setup is completed.

|   | You have finished configuring the wireles  | s security settings.   |
|---|--|--|
| Î | Network Name(SSD): A20/S RT-41/281<br>Wretess Socurby: W74-Auto-Personal - A25 + TKP<br>Network kay: 125/SRTN<br>Bouter Admin account: admin<br>Bouter Admin acassurets: admin | MAC: 20 of 30 of 06.05<br>WAN type: Astronoc P<br>WAN P: 10 10 108.0<br>LAN P: 102.108.1.1 |
| > | Goina to Internet     Advanced Setting page     Add to Eavortes  |  |

- Click Going to Internet to surf the Internet.
- Click Advanced Setting page to manually configure advanced settings for the wireless router.

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 Click Add to Favorites to add this URL to your Favorites list for quick access to the web GUI.

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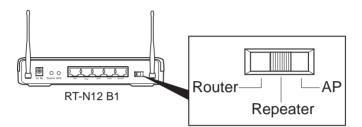


## Setting up the wireless router in Repeater mode

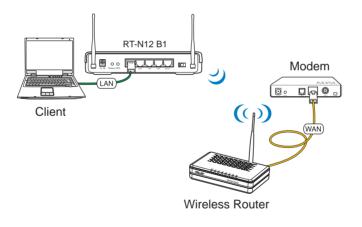
In the Repeater mode, the wireless router extends your wireless network coverage and provides you with higher quality wireless radio signals. The NAT, firewall, and IP sharing services are disabled.

#### To set up the wireless router in Repeater mode:

1. Choose the Repeater mode.



2. Connect your devices.



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**Note:** We recommend that you use an Ethernet cable (wired connection) to connect your computer to the wireless router for initial configuration to avoid possible setup problems due to wireless uncertainty.

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Chapter 2: Setting up the hardware

3. Launch your web browser and the QIS web page appears automatically. Select the AP whose wireless signal you want to extend, then click **Connect**.

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| pegasus-vip    | <b>bge</b> | 1  | WPA-PSH (TROP)      |
|----------------|------------|----|---------------------|
| pegasus-guest  | 100        | ×. | Uninsen (MER)       |
| ASUS-DOC2      | 25         | 1  | WPA2/PSK (TROP)     |
| ASUSVPN        | 6550       | 1  | WPA2 PSK (THIP-AES) |
| ASU\$12345     | 1010       | ť  | TIPAZPSK (TRIP+AES) |
| Jnet           | 853        | 2  | WEA2-PSK (AES)      |
| pegasus        | 555        | 3  | WP42-PSK (AES)      |
| pegasus custom | 875        | 4  | Uninown (WEP)       |
| WL-HW3         | -          | 2  | Open System (HONE)  |
| Enc-WL500gx    | 22         | 1  | WPAG-POK (TRIP-AEQ) |
| RTAN23         | 575        | 1  | Open System (NOME)  |

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Note: If the QIS web page does not appear after you launched your web browser, disable the proxy settings on your web browser.

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## Setting up the wireless router in AP mode

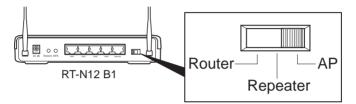
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Note: To set up the wireless router in the AP mode, use Device Discovery included in the support CD to access the web GUI.

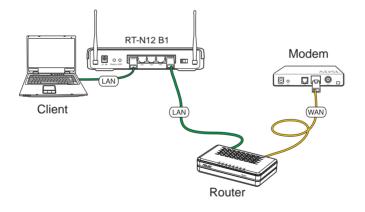
In the AP mode, the wireless router receives the WAN IP address from the router connected to the WAN port and provides you with wireless radio signals. The NAT, firewall, and IP sharing services are disabled.

#### To set up the wireless router in AP mode:

1. Choose the AP mode.



2. Connect your devices.



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Note: We recommend that you use an Ethernet cable (wired connection) to connect your computer to the wireless router for initial configuration to avoid possible setup problems due to wireless uncertainty.

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Chapter 2: Setting up the hardware

3. Launch the Device Discovery utility and click **Configure** to access the web GUI.

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4. On the login page, key in the default user name (**admin**) and password (**admin**).



5. From the main page, click the navigation menu or links to configure the various features of the wireless router.



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# Accessing the wireless router

### Setting an IP address for wired or wireless clients

To access the ASUS Wireless Router, you must have the correct TCP/IP settings on your wired or wireless clients. Ensure that the clients' IP addresses are within the same subnet as the ASUS Wireless Router.

By default, the ASUS Wireless Router integrates the DHCP server function, which automatically assigns IP addresses to the clients in your network.

But in some instances, you may want to manually assign static IP addresses on some of the clients or computers in your network rather than automatically getting IP addresses from your wireless router.

Follow the instructions below that correspond to the operating system installed on your client or computer.

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Note: In the Router mode, if you want to manually assign an IP address to your client, we recommend that you use the following settings:

- IP address: 192.168.1.xxx (xxx can be any number between 2 and 254. Ensure that the IP address is not used by another device)
- Subnet Mask: 255.255.255.0 (same as the ASUS Wireless Router)
- · Gateway: 192.168.1.1 (IP address of the ASUS Wireless Router)
- DNS: 192.168.1.1 (ASUS Wireless Router) or assign a known DNS server in your network

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 Click Start > Control Panel > Network to display the Network setup window. ۲

2. Select **TCP/IP** then click **Properties**.

Network ? × Configuration | Identification | Access Control | The following network components are installed: 📇 Microsoft Family Logon TOP/IP > Realek RTL8139(A/B/C/8130) PCI Fast Ethernet NIC
 TOP/IP > Dial-Up Adapter
 TOP/IP > Dial-Up Adapter
 TOP/IP > Realek RTL8139(A/B/C/8130) PCI Fast Ether Ì Þ Properties <u>A</u>dd... Remove Primary Network Logon: • Microsoft Family Logon File and Print Sharing. Description TCP/IP is the protocol you use to connect to the Internet and wide-area networks. ΠK Cancel

 If you want your computer to automatically obtain an IP address, click Obtain an IP address automatically then click OK. Otherwise, click Specify an IP address, then key in the IP address and Subnet Mask.

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| TCP/IP Properties                                 |  |             |             | ? ×        |  |
|---|--|-------------|-------------|------------|--|
| Bindings  | Adv  | /anced      | N           | etBIOS     |  |
| DNS Configuration                                 | Gateway  | WINS Co     | nfiguration | IP Address |  |
| If your network doe                               | An IP address can be automatically assigned to this computer.<br>If your network does not automatically assign IP addresses, ask<br>your network administrator for an address, and then type it in<br>the space below. |             |             |            |  |
| ⊙ <u>O</u> btain an IP<br>O <u>S</u> pecify an IF |  | tomatically |             |            |  |
|   |  |             |             |            |  |
|   | k:   |             |             |            |  |
|   |  |             |             |            |  |
|   |  |             |             |            |  |
|   |  |             |             |            |  |
|   |  |             |             |            |  |
|   |  |             | OK          | Cancel     |  |

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4. Select the **Gateway** tab, and key in **New gateway** then click **Add**.

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| TCP/IP Properties  |  |  |  |  |
|--|--|--|--|--|
| Bindings Advanced NetBIOS<br>DNS Configuration Gateway WINS Configuration IP Address   |  |  |  |  |
| The first gateway in the Installed Gateway list will be the default.<br>The address order in the list will be the order in which these<br>machines are used. |  |  |  |  |
| New gateway:   |  |  |  |  |
| Installed gateways:  |  |  |  |  |
| OK Cancel  |  |  |  |  |

- 5. Select the DNS configuration tab and click Enable DNS. Key in Host, Domain, and DNS Server Search Order, then click Add.
- 6. Click OK.

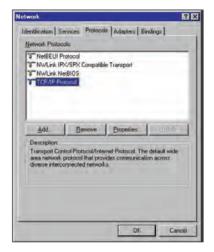
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| TCP/IP Properties                  |                               | ? ×           |
|------------------------------------|-------------------------------|---------------|
| Bindings<br>DNS Configuration      | Advanced<br>Gateway WINS Coni | NetBIOS       |
| Disable DNS     DNS     Enable DNS |                               |               |
| Host                               | D <u>e</u> main:              |               |
| DNS Server Sea                     |                               | <u>Add</u>    |
| Domain Suffix Se                   |                               | Add<br>lemove |
|                                    | 0                             | K Cancel      |



 Go to Control Panel > Network to display the Network setup window then select the Protocols tab. ۲

2. Select **TCP/IP Protocol** from the Network Protocols list then click **Properties**.



 From the IP Address tab of the Microsoft TCP/IP Properties window, you can:

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- Select the type of network adapter installed in your system.
- Set the router to assign IP address automatically.
- Manually set up the IP address, subnet mask, and default gateway.

| icrosoft TCP/IP P  | roperties        |               | ?              |
|--|------------------|---------------|----------------|
| IP Address DNS   | WINS Address     | DHCP Relay    | Routing        |
| An IP address can<br>by a DHEP server,<br>ask your network a<br>the space below. | It your network  | does not have | a DHCP server. |
| Adagler.   |                  |               | uc 🗖           |
|  | address from a D | HCP server    |                |
| C Specify an II  | Paddress         |               |                |
|  | 1                |               |                |
|  | 1                |               |                |
|  | -                |               |                |
|  |                  |               | Advanced       |
|  |                  |               |                |

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 Select the DNS tab then click Add under the DNS Service Search Order and key in DNS. ۲

| Domain Name System (DNS)<br>Host Name: | Dgmain:  |
|--|----------|
| DNS Service Search Order               |          |
|  | Lini     |
| Add.                                   | I mare I |
| Domain Sulfix Search Order             |          |
|  | TQU      |
| 1                                      | Transmit |

### Windows® 2000

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1. Click Start > Control Panel > Network and Dial-up Connection. Right-click Local Area Connection then click Properties.



Chapter 3: Configuring the clients

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2. Select Internet Protocol (TCP/IP), then click Properties.

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- 3. Select Obtain an IP address automatically if you want the IP settings to be assigned automatically. Otherwise, select Use the following IP address: and key in IP address, Subnet mask, and Default gateway.
- Select Obtain DNS server address automatically if you want the DNS server settings to be assigned automatically. Otherwise, select Use the following DNS server addresses: and key in the Preferred and Alternate DNS server.
- 5. Click OK when done.

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|                                  | ed automatically if your network supports<br>seed to ark your network administrator for   |
|----------------------------------|---|
| he appropriate IP settings.      | stan to dry love training dramatication on  |
| ⊕ Elain an IP address auto     ■ | omatically  |
| C Use the following IP addre     | and the second se |
| Puddina                          |   |
| Splanet mark                     |   |
| Detail garaway.                  |   |
| Optain DNS server addres         | ess automatically   |
| C Use the following DNS se       | erver addresses:  |
| Ereimand BNSaverver.             |   |
| etende DNS kever                 |   |
|                                  | Adyanced  |

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#### Windows® XP

 Click Start > Control Panel > Network Connection. Right-click Local Area Connection then select Properties.

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- 2. Select Internet Protocol (TCP/IP), then click Properties.
- Select Obtain an IP address automatically if you want the IP settings to be assigned automatically. Otherwise, select Use the following IP address: and key in IP address, Subnet mask, and Default gateway.
- Select Obtain DNS server address automatically if you want the DNS server settings to be assigned automatically. Otherwise, select Use the following DNS server addresses: and key in the Preferred and Alternate DNS server.
- 5. Click OK when done.

| eneral Alternate Co   | nfiguration    |             |   |         |
|---|----------------|-------------|---|---------|
| ou can get IP settin<br>his capability. Otherv<br>he appropriate IP set | vise, you need |             |   |         |
| Obtain an IP ad   | dress automati | cally       |   |         |
| O Use the followin  | ig IP address: |             |   |         |
| IP. address   |                |             |   |         |
| Subriel mask.   |                |             |   |         |
| Detault gateway   |                |             |   |         |
| Obtain DNS ser  | ver address au | tomatically |   |         |
| O Use the followin  | g DNS server   | addresses:  |   |         |
| Preterred DNS ser   | Ven            |             |   |         |
| Alternate DNS ser   | Vēn            |             |   |         |
|   |                |             | - |         |
|   |                |             | A | dvanced |

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### Windows® Vista

1. Go to Start > Control Panel > Network and Internet > Network and Sharing Center. Click View status > Properties > Continue.

| Connect using:  |   |  |
|---|---|--|
| Realtek RT  | L8168B/8111B Family PCI   | -E Gigabit Ethemet   |
|   |   | Configure  |
| This connection us  | ses the following items:  |  |
|   | Microsoft Networks  |  |
| QoS Pack  | ket Scheduler   |  |
|   |   |  |
| File and F  | Printer Sharing for Microsoft   |  |
| File and F  | Printer Sharing for Microsoft<br>Protocol Version 6 (TCP/IP   | v6)  |
| File and F File and F File and F File File File File File File File Fil   | Printer Sharing for Microsoft<br>Protocol Version 6 (TCP/IP<br>Protocol Version 4 (TCP/IP)  | v6)<br>v4)   |
| File and F | Printer Sharing for Microsoft<br>Protocol Version 6 (TCP/IP)<br>Protocol Version 4 (TCP/IP)<br>rr Topology Discovery Map                            | v6)<br>v4)<br>per I/O Driver   |
| File and F | Printer Sharing for Microsoft<br>Protocol Version 6 (TCP/IP<br>Protocol Version 4 (TCP/IP)  | v6)<br>v4)<br>per I/O Driver   |
| File and F | Printer Sharing for Microsoft<br>Protocol Version 6 (TCP/IP)<br>Protocol Version 4 (TCP/IP)<br>rr Topology Discovery Map                            | v6)<br>v4)<br>per I/O Driver   |
| Image: Second secon                  | Printer Sharing for Microsoft<br>hotocol Version 6 (TCP/IP)<br>hotocol Version 4 (TCP/IP)<br>in Topology Discovery Map<br>in Topology Discovery Res | v6)<br>v4)<br>per I/O Driver<br>ponder                                     |
| <ul> <li>✓ ■ File and F</li> <li>✓ Internet P</li> <li>✓ Internet P</li> <li>✓ Internet P</li> <li>✓ Link-Laye</li> <li>✓ Link-Laye</li> <li>✓ Install</li> <li>Description</li> <li>Transmission Co</li> </ul>   | Printer Sharing for Microsoft<br>hotocol Version 6 (TCP/IP)<br>hotocol Version 4 (TCP/IP)<br>in Topology Discovery Map<br>in Topology Discovery Res | v6)<br>v4)<br>per I/O Driver<br>ponder<br>Properties<br>tocol. The default |

- 2. Select Internet Protocol Version 4 (TCP/IPv4), then click Properties.
- 3. Select Obtain an IP address automatically if you want the IP settings to be assigned automatically. Otherwise, select Use the following IP address: and key in IP address and Subnet mask.

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- 4. Select Obtain DNS server address automatically if you want the DNS server settings to be assigned automatically. Otherwise, select Use the following DNS server addresses: and key in the Preferred and Alternate DNS server.
- 5. Click OK when done.

| eneral  | Alternate Configuration  |               |        |                |      |
|---------|--|---------------|--------|----------------|------|
| his cap | n get IP settings assigned<br>bability. Otherwise, you n<br>appropriate IP settings. |               |        |                |      |
| 0       | otain an IP address autor  | natically     |        |                |      |
| OUs     | e the following IP addres  | s:            |        |                |      |
| IP ad   | ddress;  |               |        |                |      |
| Subr    | iet mask:  |               |        |                |      |
| Defa    | ult gateway:   | 192 . 1       | 68 . 1 | i 1            |      |
| 0 0     | tain DNS server address  | automatically |        |                |      |
| OUs     | e the following DNS serve  | er addresses: |        |                |      |
| Prefe   | erred DNS server:  | -             |        |                |      |
| Alter   | nate DNS server:   |               | ÷.     |                |      |
|         |  |               |        |                |      |
|         |  |               |        | Ad <u>v</u> ar | nced |
|         |  |               | _      | _              | _    |

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# Configuring via the web GUI

The router's web graphics user interface (web GUI) allows you to configure these features: **Network Map** and **EZQoS Bandwidth Management**.

#### To access the web GUI:

1. Launch a web browser, then key in the router's IP address. The login page of the router's web GUI appears.



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#### Note:

- In the Router mode, the router's IP address is 192.168.1.1.
- In the Repeater and AP modes, use Device Discovery included in the support CD to find the router's IP address.
- 2. On the login page, key in the default user name (**admin**) and password (**admin**).

| ne server 19  | 2.168.1.1 at RT-N12B1 requires a username and password.   |
|---------------|---|
| Varning: Thi  | s server is requesting that your username and password be   |
| ent in an ins | ecure manner (basic authentication without a secure   |
| onnection).   |   |
| _             |   |
|               | admin   |
| 110           | [   |
|               |   |
|               | The second |
|               | Remember my credentials   |
|               | Remember my credentials   |

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Chapter 4: Configuring via the web GUI

3. From the main page, click the navigation menu or links to configure the various features of the ASUS Wireless Router.

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# **Using the Network Map**

Network Map allows you to view the status and configure the connection settings of the Internet, system, and clients in your network. It enables you to quickly set up your Wide Area Network (WAN) using the Quick Internet Setup (QIS) feature, or to quickly set up your Local Area Network (LAN) using the WPS Wizard.

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Note: For more details on the WPS Wizard, refer to the section WPS Wizard in Chapter 5 of this user manual.

To view the status or configure the settings, click any of these icons displayed on the main page:

| lcon | Description   |
|------|---|
|      | Internet status<br>Click this icon to display information on the Internet<br>connection status, WAN IP address, DNS, connection type,<br>and gateway address. From the Internet status screen, use<br>the Quick Internet Setup (QIS) feature to quickly set up your<br>network. |
|      | System status<br>Click this icon to display information on the SSID,<br>authentication and encryption methods, LAN IP, MAC<br>address, or turn the wireless radio on/off. Enable the WPS<br>mode from the System status screen.   |
|      | <b>Client status</b><br>Click this icon to display information about the clients or<br>computers in the network, and allows you to block/unblock<br>a client.   |

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## **Creating multiple SSID profiles**

The wireless router allows you to create multiple SSID profiles that meet various working scenarios.

#### To create an SSID profile:

1. Under System status, click Add.

| RT-N12B1   | Firmuar    | R/S RT-N1281<br>e Version: <u>1018</u><br>in Mode: <u>Bolds</u> | Language:<br>English |   |
|--|------------|---|----------------------|---|
| Network Hap  |            |   |                      | ASUS RT-N12B1                           |
| Operation Hode   |            | Connected   |                      | ABUG (2                                 |
| Bandwidth<br>Nanagemert  |            |   | Wireless Speed       | Up to S4Mops ·                          |
| Advarced Setting   | A          | Security level:   |                      | Save                                    |
| Arrest 1   |            | WPA-Auto-Personal<br>TKIP+AES                                   | LAN IP               | 192.168.1.1                             |
| a lat  |            | TRIPHAES  | PIN code             | 12343670                                |
| 10 - 11  | 0          |   | MAC address          | 20:cf:30:c5:06:f5                       |
| Direct Control of Cont | 36         |   | WPS                  | Click the button to enable<br>WPS mode. |
| 0 1 mm tog   | Clienta: 1 |   |                      | More Config                             |
| 1  |            |   |                      |   |
|  |            |   |                      |   |
|  |            |   |                      |   |
|  |            |   |                      |   |
|  |            |   |                      |   |

2. Configure the profile settings, then click Add.

| SSD         Bit Adds         PRUT           SSD         Anthenkickie<br>Markenkickie<br>MUP Encrystic         SSD         Bit Adds         PRUT           Markenkickie<br>MUP Encrystic         Total         Status         Markenkickie<br>MUP Encrystic         Total         Mar  |          |
|---|----------|
| Stagest<br>Backgenage         Authentication<br>WHP Encryption         Cond Datem         month Kny           ************************************  |          |
| Mittle Encryption         None         Mades Same         Mades  |          |
|   |          |
| 11 HI | _        |
| Network access Both - Natron 192.108.1.1  |          |
| Bandwidth Priority Normal - 4 code 12345670   |          |
| Hide SSID O'Yes a No Caddress 20:dr30:c5:65:45  |          |
| Cick the bottom   | to enabl |
| Clerte: 1 More Confe  |          |

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# Managing bandwidth with EzQoS

 $\ensuremath{\mathsf{EzQoS}}$  Bandwidth Management enables you to set the bandwidth priority and manage the network traffic.

#### To set up the bandwidth priority:

1. Click **EzQoS Bandwidth Management** from the navigation menu at the left side of your screen.



2. Click each of these four applications to set the bandwidth priority:

| lcon     | Description   |
|----------|---|
| <b>F</b> | Gaming Blaster<br>The router handles gaming traffic at first priority.  |
|          | Internet Application<br>The router handles the e-mail, web browsing and other Internet<br>applications traffic at first priority. |
|          | <b>FTP</b><br>The router handles at first priority the traffic of downloading/<br>uploading data to/from the FTP server.          |
|          | Voip/Video Streaming<br>The router handles the audio/video traffic at first priority.   |

3. Click Save to save the configuration settings.

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# Upgrading the firmware

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Note: Download the latest firmware from the ASUS website at http://www.asus.com.

#### To upgrade the firmware:

1. Click **Advanced Setting** from the navigation menu at the left side of your screen.

| Network Map  | Wireless   | LAN   | WAN   | Firewall   |
|--|--|---|---|--|
| Operation Mode   | Configure your wireless<br>connection, security, and<br>other advanced parameters.             | Configure LAN, dhop, and route settings.  | Configure the Internet<br>connection, QoS, and Server<br>setting.                 | Configure the firewall and<br>filter mechanisms to proted<br>your network. |
| E2QoS<br>Bandwidth<br>Harrisgamore<br>M Advanced Setting | General     WPS     Wreless MAC Piter     KADUUS Setting     Professional                      | CAN IP     OHOP Server     Route  | Internet, Connection     QoS     Nort Trapper     Virtual Server     DM2     DDNS | General     URL Viller     MAC Filter     LAN to WAN Filter                |
| • Market   | Administration   | System Log  |   |  |
| WAN  | Configure the system and upgrade the firmware of RT-<br>N1281.                                 | Nonitor the status and various system logs.                                       | 1   |  |
| Activities   | <ul> <li>System</li> <li>Primivare Upgrade</li> <li>Restore/Save/Upload<br/>Setting</li> </ul> | General Log     CHCP leases     Wreless Log     Port forwarding     Routing Table |   |  |

- 2. Under the Administration menu, click Firmware Upgrade.
- 3. In the **New Firmware File** field, click **Browse** to locate the new firmware on your computer.
- 4. Click Upload. The uploading process takes about three minutes.

Note: If the upgrade process fails, use the Firmware Restoration utility to restore the system. For details on this utility, refer to the section **Firmware Restoration** in Chapter 5 of this user manual.

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# **Restoring/Saving/Uploading settings**

#### To restore/save/upload the settings:

- 1. Click **Advanced Setting** from the navigation menu at the left side of your screen.
- 2. Under the Administration menu, click Restore/Save/Upload Setting.

| Contraction Holds         Administration - Restore/SaveUpload Setting           Exclosing<br>memory and a low<br>Advanced Setting         This function above you to save current settings of RT-Int2011 to a life, or load settings from<br>a life,           Advanced Setting         Face of codes |  |                  |                  |
|---|--|------------------|------------------|
| Bandeuch Anagement A Be   | store/Save/Upload Setting                            | Ar               | Operation Hode   |
| Advanced Setting Febry Column Restore   | ettings of RT-N12B1 to a tile, or load settings from |                  | Bandwidth        |
|   |  | Fidory debut     | Advanced Setting |
| Des states  |  | Done & 1994      |                  |
| Anter Anter Anter Anter   | Dave   | Restore entities | E UN             |

- 3. Select the tasks that you want to do:
  - To restore to the default factory settings, click **Restore**, and click **OK** in the confirmation message.
  - To save the current system settings, click **Save**, and click **Save** in the file download window to save the system file in your preferred path.
  - To restore previous system settings, click Browse to locate the system file that you want to restore, then click Upload.

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|   |    |           |      | ( ) |            |               |                |   |   |
|---|----|-----------|------|-----|------------|---------------|----------------|---|---|
|   |    |           |      |     |            |               |                |   |   |
|   |    |           |      |     |            |               |                |   |   |
|   |    |           |      |     |            |               |                |   |   |
|   |    |           | <br> |     |            |               |                | - |   |
|   | -  |           | <br> |     |            |               |                | - |   |
|   |    |           |      |     |            |               |                |   |   |
|   | -  |           |      |     |            |               |                | - |   |
|   | -  |           |      |     |            |               |                | - |   |
|   |    |           |      |     |            |               |                | _ |   |
|   |    |           |      |     |            |               |                |   |   |
|   |    |           |      |     |            |               |                | - |   |
|   |    |           |      |     |            |               |                | _ |   |
|   |    |           |      |     |            |               |                |   |   |
|   | -  |           |      |     |            |               |                | - |   |
|   | -  |           |      |     |            |               |                | _ |   |
|   |    |           |      |     |            |               |                |   |   |
|   | -  |           | <br> |     |            |               |                | - |   |
|   |    |           |      |     |            |               |                | - |   |
| ۲ |    |           |      |     |            |               |                |   | ۲ |
|   | -  |           |      |     |            |               |                | - |   |
|   | -  |           | <br> |     |            |               |                | - |   |
|   |    |           |      |     |            |               |                | - |   |
|   |    |           |      |     |            |               |                |   |   |
|   |    |           | <br> |     |            |               |                | - |   |
|   |    |           |      |     |            |               |                | _ |   |
|   |    |           |      |     |            |               |                |   |   |
|   | -  |           |      |     |            |               |                | - |   |
|   | -  |           | <br> |     |            |               |                | - |   |
|   |    |           |      |     |            |               |                |   |   |
|   | -  |           |      |     |            |               |                |   |   |
|   |    |           |      |     |            |               |                | - |   |
|   | -  |           |      |     |            |               |                | _ |   |
|   |    |           |      |     |            |               |                |   |   |
|   |    |           |      |     |            |               |                | _ |   |
|   | 34 | RT-N12 B1 |      |     | Chapter 4: | Configuring v | ia the web GUI |   |   |



# Installing the utilities

The support CD contains the utilities for configuring the ASUS Wireless Router. To install the ASUS WLAN Utilities in Microsoft<sup>®</sup> Windows, insert the support CD in the CD drive. If Autorun is disabled, run **setup.exe** from the root directory of the support CD.

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#### To install the utilities:

1. Click Install...Utilities.



### 2. Click Next.

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Note: When you install the utilities, the setup wizard automatically detects your computer's operating system. If you are using Windows<sup>®</sup> 7 / Vista OS, click Install on the confirmation message.

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Chapter 5: Installing the utilities

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3. Click **Next** to accept the default destination folder or click **Browse** to specify another path.

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 Click Next to accept the default program folder or enter another name.

5. Click **Finish** when setup is completed.

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# **Device Discovery**

Device Discovery is an ASUS WLAN utility that detects an ASUS wireless router and enables you to configure the device.

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#### To launch the Device Discovery utility:

From your computer's desktop, click Start > All Programs > ASUS Utility > RT-N12 B1 Wireless Router > Device Discovery.

| 9 | Device Disc                | overy             |             |               |                       | ×   |  |
|---|----------------------------|-------------------|-------------|---------------|-----------------------|-----|--|
|   | Device                     | SSID              | IP Address  | Subnet Mask   | Printer               |     |  |
|   | RT-N12B1                   | pegasus           | 10.10.188.1 | 255.255.255.0 |                       |     |  |
|   |                            |                   |             |               |                       |     |  |
|   |                            |                   |             |               |                       |     |  |
|   |                            |                   |             |               |                       |     |  |
|   | •                          |                   |             |               |                       | - F |  |
|   |                            | 指 <u>C</u> onfigu | re          | ے<br>Search   | <u>⊀</u> <u>E</u> xit |     |  |
| N | Number of devices found: 1 |                   |             |               |                       |     |  |

- Click **Configure** to access the web GUI and configure the wireless router.
- Click **Search** to search for ASUS wireless routers within range.
- Click **Exit** to exit the application.

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# **Firmware Restoration**

Firmware Restoration is used on an ASUS Wireless Router that failed during its firmware upgrading process. It uploads the firmware that you specify. The process takes about three to four minutes.

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Important: Launch the rescue mode before using the Firmware Restoration utility.

#### To launch the rescue mode and use the Firmware Restoration utility:

- 1. Unplug the wireless router from the power source.
- Hold the Restore button at the rear panel and simultaneously re-plug the wireless router into the power source. Release the Restore button when the Power LED at the front panel flashes slowly, which indicates that the wireless router is in the rescue mode.
- From your computer's desktop, click Start > All Programs > ASUS Utility > RT-N12 B1 Wireless Router > Firmware Restoration.

| 🕹 Firmware Restoration   | ×      |
|--|--------|
| Eilename: Status<br>Once you have specified a file, click the "Upload" button. | Browse |
|  |        |
| <u>U</u> pload <u>C</u> lose   |        |

4. Specify a firmware file, then click Upload.

Note: This is not a firmware upgrade utility and cannot be used on a working ASUS Wireless Router. Normal firmware upgrades must be done through the web interface. Refer to Chapter 4: Configuring via the web GUI for more details.

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## **WPS Wizard**

WPS (Wi-Fi Protected Setup) allows you to set up a secure and protected wireless network easily.

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## **Using WPS Wizard**



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#### Note:

- · Ensure that you use a wireless LAN adapter with WPS function.
- Windows® operating systems and wireless LAN cards/adapters that support WPS:

| OS Support      | Wireless Adapter Support                |  |  |  |  |  |
|-----------------|---|--|--|--|--|--|
|                 | Intel wireless LAN card                 |  |  |  |  |  |
| Vista 32/64     | ASUS 167gv2 driver v3.0.6.0 or later    |  |  |  |  |  |
|                 | ASUS 160N/130N driver v2.0.0.0 or later |  |  |  |  |  |
|                 | Intel wireless LAN card                 |  |  |  |  |  |
| XP SP2          | ASUS 167gv2 driver v1.2.2.0 or later    |  |  |  |  |  |
|                 | ASUS 160N/130N driver v1.0.4.0 or later |  |  |  |  |  |
|                 | ASUS LAN card with ASUS WLAN Utility    |  |  |  |  |  |
| XP SP1 and 2000 | ASUS 167gv2 driver v1.2.2.0 or later    |  |  |  |  |  |
|                 | ASUS 160N/130N driver v1.0.4.0 or later |  |  |  |  |  |

### To use WPS Wizard:

1. Follow the onscreen instructions to set up your hardware. When done, click Next.



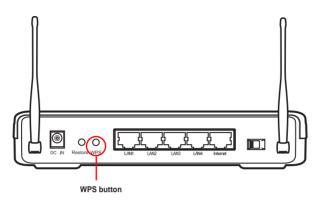
Note: Use the WPS Wizard with one wireless client at a time. If the wireless client cannot discover the wireless router, shorten the distance between the client and the router.

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Chapter 5: Installing the utilities

2. Push the WPS button at the rear panel of the wireless router for more than five seconds.

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3. On the WPS Wizard, click Next to continue.



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Notes:

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- · When running WPS, the Internet connection pauses briefly then reestablishes the connection.
- If the WPS button is pushed without running the WPS Wizard, the PWR indicator flashes and Internet connection pauses briefly and then reestablishes the connection.

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- - 4. Assign a name to your network, then click Next.



5. Use the auto-generated passphrase as your network's security key or manually assign a passphrase containing between 8 and 63 characters. Click **Next**.

| Make your network more secure with a passphrase  |  |
|--|--|
| The wrand will use the passphrase provided below to generate a WPA<br>accurity key for you.<br>Passphrase: | Help A socurity key can prevent<br>outsider from accessing your<br>wreless network. Use the<br>automatically generated<br>string as your passphrase or<br>assign the passphrase<br>manually. |
| Create a different passphrase for me     Show advanced network security options                            |  |

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 Installation is completed. Click Save or print settings for future reference or Save settings to a USB flash drive to add other devices to the network. Click Next to connect to the Internet.

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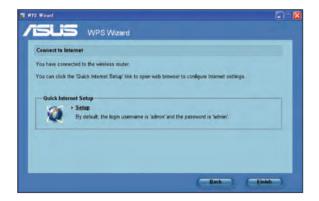


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Note: For more details on adding devices to the network using a USB flash drive, refer to the section Adding network devices using a USB flash drive on the next page.

7. You have connected to the wireless router. If you want to configure the Internet settings, click **Setup**. Click **Finish** to close the WPS Wizard.



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## Adding network devices using a USB flash drive

With the WPS utility, you can add devices to your network using a USB flash drive.

To add network devices using a USB flash drive:

1. In the WPS Wizard, click Save settings to a USB flash drive.

| is wizard finished s |  |  |
|----------------------|--|--|
| Print or save wirele |  |  |
|                      | se the following information to others to connect to this network.   |  |
| Network Name:        | TEST_ASUS  |  |
| Passphrase:          | OGGENVUGBKREOOTYEZEZ   |  |
| Security:            | TKIP (WPA-Personal)  |  |
| Save                 | er print settings<br>er print the wendess settings for future reference<br>settings to a USB flashe drives<br>SUS drive to advine devices to the network |  |

2. Plug a USB flash drive into the USB port on your computer, and then select the drive from the dropdown list. When done, click **Next** to continue.



Chapter 5: Installing the utilities

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3. Remove the USB flash drive from this computer, and then plug it to the computer that you want to add to the wireless network.

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4. Locate the **SetupWireless.exe** from the USB drive, and double-click to run it. Click **Yes** to add the computer to the wireless network.



5. Click OK to exit the Wireless Network Setup Wizard.



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## Troubleshooting

This troubleshooting guide provides solutions to some common problems that you may encounter while installing or using the ASUS Wireless Router. These problems require simple troubleshooting that you can perform by yourself. Contact the ASUS Technical Support if you encounter problems not mentioned in this chapter.

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| Problem  | Action  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|
| I cannot access the web GUI for configuring the router.            | <ol> <li>Launch a web browser, then click Tools &gt;<br/>Internet Options</li> <li>Under Temporary Internet files, click<br/>Delete Cookies and Delete Files</li> <li>Disable the proxy settings of the web<br/>browser.</li> </ol>   |  |  |  |  |  |  |
| The client cannot establish a wireless connection with the router. | <ul> <li>Out of Range:</li> <li>Put the router closer to the wireless client.</li> <li>Try to change the channel settings.</li> <li>Authentication: <ul> <li>Use wired connection to connect to the router.</li> <li>Check the wireless security settings.</li> <li>Press the Restore button at the rear panel for more than five seconds.</li> </ul> </li> </ul> |  |  |  |  |  |  |
|  | <ul> <li>Cannot find the router:</li> <li>Press the Restore button at the rear panel for more than five seconds.</li> </ul>   |  |  |  |  |  |  |
|  | Check the setting in the wireless adapter<br>such as SSID and encryption settings.  |  |  |  |  |  |  |

Chapter 6: Troubleshooting

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| Problem   | Action  |
|---|---|
| Cannot access the Internet via wireless LAN adapter.  | <ul> <li>Move the router closer to the wireless client.</li> <li>Check whether the wireless adapter is connected to the correct wireless router.</li> <li>Check whether the wireless channel in use conforms to the channels available in your country/area.</li> <li>Check the encryption settings.</li> <li>Check if the ADSL or Cable connection is correct.</li> <li>Retry using another Ethernet cable.</li> </ul>   |
| Internet is not accessible.   | <ul> <li>Check the status indicators on the ADSL modem and the wireless router.</li> <li>Check if the WAN LED on the wireless router is ON. If the LED is not ON, change the cable and try again.</li> </ul>  |
| When ADSL Modem "Link"<br>light is ON (not blinking), this<br>means Internet Access is<br>possible.   | <ul> <li>Restart your computer.</li> <li>Refer to the Quick Start Guide of the wireless router and re-configure the settings.</li> <li>Check if the WAN LED on the wireless router is ON.</li> <li>Check the wireless encryption settings.</li> <li>Check if the computer can get the IP address (via both wired network and wireless network).</li> <li>Ensure that your web browser is configured to use the local LAN, and is not configured to use a proxy server.</li> </ul> |
| If the ADSL "LINK" light blinks<br>continuously or stays off,<br>Internet access is not possible<br>- the Router is unable to<br>establish a connection with<br>the ADSL network. | <ul> <li>Ensure that all your cables are all properly connected.</li> <li>Disconnect the power cord from the ADSL or cable modem, wait a few minutes, then reconnect the cord.</li> <li>If the ADSL light continues to blink or stays OFF, contact your ADSL service provider.</li> </ul>   |
| Network name or encryption keys are forgotten.  | <ul> <li>Try setting up the wired connection and configuring the wireless encryption again.</li> <li>Press the Restore button at the rear panel of the wireless router for more than five seconds.</li> </ul>   |

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| Problem   | Action   |
|---|--|
| How to restore the system to<br>its default settings? | <ul> <li>Press the Restore button at the rear panel of the wireless router for more than five seconds.</li> <li>Refer to the section Restoring/Saving/ Uploading settings in Chapter 4 of this user manual.</li> <li>The following are the factory default settings: User Name: admin Password: admin</li> <li>Enable DHCP: Yes (if WAN cable is plugged in) IP address: 192.168.1.1</li> <li>Domain Name: (Blank)</li> <li>Subnet Mask: 255.255.255.0</li> <li>DNS Server 1: 192.168.1.1</li> </ul> |
|   | DNS Server 2: (Blank)<br>SSID: ASUS  |
| I cannot use 192.168.1.1 to                           | Check the router's operation mode.   |
| enter the web GUI.                                    | • In the Router mode, the default IP address is 192.168.1.1.   |
|   | <ul> <li>In the Repeater / AP mode, use Device<br/>Discovery to find the router's IP address.</li> </ul>   |

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## **ASUS DDNS Service**

RT-N12 B1 supports the ASUS DDNS service. When exchanging devices at the service center, if you have registered the ASUS DDNS service and want to keep the original domain name, data transfer is a must. Visit your local service center for more information.

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Notes:

 If there is no activity in the domain - such as reconfiguring the router or accessing the registered domain name - within 90 days, the system automatically deletes the registered information

· If you encounter any problem or difficulty in using your device, contact the service center.

## Frequently Asked Questions (FAQs)

#### 1. Will the registered information be lost or registered by others?

If you have not updated the registered information in 90 days, the system automatically deletes the registered information and the domain name may be registered by others.

2. I did not register the ASUS DDNS for the router I bought six months ago. Can I still register it?

Yes, you can still register the ASUS DDNS service for your router. The DDNS service is embedded in your router, so you can register the ASUS DDNS service anytime. Before registering, click **Query** to check if the hostname has been registered or not. If not, the system registers the hostname automatically.

3. I have registered a domain name before and it has been working well until my friends told me that they could not access my domain name.

Check the following:

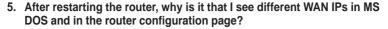
- 1. The internet is working well.
- 2. The DNS server is working well.
- 3. The last time you updated the domain name.

If there are still problems in accessing your domain name, contact the service center.

# 4. Can I register two domain names to separately access my http and ftp servers?

No, you cannot. You can only register one domain name for one router. Use port mapping to implement security in the network.

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This is normal. The interval time between the ISP DNS server and ASUS DDNS results in different WAN IPs in MS DOS and in the router configuration page. Different ISPs may have different interval time for IP updating.

### 6. Is the ASUS DDNS service free, or is it just a trial version?

The ASUS DDNS service is a free and embedded service in some ASUS routers. Check your ASUS router if it supports the ASUS DDNS service.

Chapter 6: Troubleshooting

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| 50 | RT-N12 B1 |      |   | Chapte | er 6: Troubl | eshooting |   |  |

# **Appendices**

## Notices

## **ASUS Recycling/Takeback Services**

ASUS recycling and takeback programs come from our commitment to the highest standards for protecting our environment. We believe in providing solutions for you to be able to responsibly recycle our products, batteries, other components, as well as the packaging materials. Please go to <a href="http://csr.asus.com/english/Takeback.htm">http://csr.asus.com/english/Takeback.htm</a> for the detailed recycling information in different regions.

## REACH

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Complying with the REACH (Registration, Evaluation, Authorisation, and Restriction of Chemicals) regulatory framework, we published the chemical substances in our products at ASUS REACH website at <a href="http://csr.asus.com/english/REACH.htm">http://csr.asus.com/english/REACH.htm</a>

## **Federal Communications Commission Statement**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



Warning: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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For product available in the USA/Canada market, only channels 1~11 can be operated. Selection of other channels is not possible.

### **Prohibition of Co-location**

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

### Safety Information

To maintain compliance with FCC's RF exposure guidelines, this equipment should be installed and operated with minimum distance 20cm between the radiator and your body. Use on the supplied antenna.

### Declaration of Conformity for R&TTE directive 1999/5/EC

Essential requirements – Article 3

Protection requirements for health and safety – Article 3.1a

Testing for electric safety according to EN 60950-1 has been conducted. These are considered relevant and sufficient.

Protection requirements for electromagnetic compatibility - Article 3.1b

Testing for electromagnetic compatibility according to EN 301 489-1 and EN 301 489-17 has been conducted. These are considered relevant and sufficient.

Effective use of the radio spectrum - Article 3.2

Testing for radio test suites according to EN 300 328- 2 has been conducted. These are considered relevant and sufficient.

## **CE Mark Warning**

This is a Class B product, in a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Operation Channels: Ch1~11 for N. America, Ch1~14 Japan, Ch1~13 Europe (ETSI)

## **IC Warning**

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The Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulation.

Cet appareil numerique de la class B respecte toutes les exigences du Reglement sur le materiel brouilleur du Canada.

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Version 2, June 1991

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c) If the modified program normally reads commands interactively when run,

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## **Safety Warning**

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SAFE TEMP: This wireless router should be only used in environments with ambient temperatures between  $5^{\circ}C(41^{\circ}F)$  and  $40^{\circ}C(104^{\circ}F)$ .

DO NOT expose to or use near liquids, rain, or moisture. DO NOT use the modem during electrical storms.

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## **ASUS Contact information**

### ASUSTeK COMPUTER INC. (Asia Pacific)

Address Website 15 Li-Te Road, Peitou, Taipei, Taiwan 11259 www.asus.com.tw

#### **Technical Support**

Telephone Support Fax Online support +886228943447 +886228907698 support.asus.com

## **ASUS COMPUTER INTERNATIONAL (America)**

Address Telephone Fax Website Online support 800 Corporate Way, Fremont, CA 94539, USA +15029550883 +15029338713 usa.asus.com support.asus.com

### ASUS COMPUTER GmbH (Germany and Austria)

Address Fax Website Online contact

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Harkort Str. 21-23, D-40880 Ratingen, Germany +492102959911 www.asus.de www.asus.de/sales\*

#### **Technical Support**

Telephone (Component) Telephone (System/Notebook/Eee/LCD) Fax Online support +491805010923 +491805010920 +492102959911 support.asus.com

\* Available on this site is an online Technical Inquiry Form that you can fill out to contact technical support.

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| Manufacturer:             | ASUSTeK Computer Inc.                  |   |  |  |  |  |
|---------------------------|--|---|--|--|--|--|
|                           | Tel:                                   | +886-2-2894-3447  |  |  |  |  |
|                           | Address:                               | No. 150, LI-TE RD., PEITOU, TAIPEI<br>112, TAIWAN                                       |  |  |  |  |
| Authorised representative | ASUS Computer GmbH                     |   |  |  |  |  |
| in Europe:                | Address:                               | HARKORT STR. 21-23, 40880<br>RATINGEN, GERMANY  |  |  |  |  |
| Authorised distributors   | BOGAZICI BIL GISAYAR SAN. VE TIC. A.S. |   |  |  |  |  |
| in Turkey:                | Tel:                                   | +90 212 3311000   |  |  |  |  |
|                           | Address:                               | AYAZAGA MAH. KEMERBURGAZ<br>CAD. NO.10 AYAZAGA/ISTANBUL                                 |  |  |  |  |
|                           | CIZGI Elektronik San. Tic. Ltd. Sti.   |   |  |  |  |  |
|                           | Tel:                                   | 0090 2123567070   |  |  |  |  |
|                           | Address:                               | CEMAL SURURI CD. HALIM MERIC<br>IS MERKEZI No:15/C D: 5-6 34394<br>MECIDIYEKOY/ISTANBUL |  |  |  |  |

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